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Rural District Council of Dartford

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR 1951

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RURAL DISTRICT COUNCIL OF DARTFORD

Annual Report for 1951 of the Medical Officer of Health

November, 1952.

To The Chairman and Members,

Dartford Rural District Council.

Madam, Ladies and Gentlemen,

I am writing to amplify the statistical material of the fifty-third annual report which I have the honour to submit herewith.

LIMITATIONS. In a population of our size some data are composed of small numbers in which chance plays too large a part in their formation. Rates, *e.g.*, death rates of infants under one year of age, formed from such small numbers must therefore be viewed with caution as no reliable conclusions can be drawn therefrom.

The form of medical certificate of the cause of death used in this country is that prescribed by the World Health Organisation and this form reveals what, in the certifying practitioner's mind is the underlying cause of death. An exception is the form used by H.M. Coroners whose certificates are thereby at times ambiguous. Where the underlying cause is not clear the Registrar General makes special inquiries which we do not, therefore the classification provided by him differs slightly from that compiled locally. Where feasible the Registrar General's figures will be used for discussion but otherwise, *e.g.*, where age is considered, our own will have to suffice.

Notification of notifiable disease in this district is, generally, carried out conscientiously. There are, however, exceptions and one general practitioner has notified only three cases in seven years, an attitude which must make our records misleading.

Other Authorities have responsibilities in regard to the health of this Rural District and this account as a report on the health of the community is therefore incomplete as only a portion of the relevant facts are in our possession.

We have no measure of the "physical, mental and social well-being" of the community.

SOCIAL CLASS. Infant mortality, coronary disease, tuberculosis, cancer of the stomach, and other diseases have been shown or have been thought to vary in their incidence amongst the different social classes. An attempt has therefore been made in this report to classify our births and deaths on these lines in the hope that, although rough and ready, such records may after several years throw up some point of interest about the home or working environment.

Unfortunately we have no social classification of our population figure and this prevents us from calculating birth rates and death rates from different diseases for the different classes.

The Classification of Occupations 1950 of the General Register Office has been our guide and may be summarised: —

Class I	Professional, etc., occupations: — Barristers, architects, engineers, bank managers, company directors, commissioned officers, etc.
Class II	Intermediate occupations: — Managers of retail businesses, nurses, teachers, publicans, costing clerks, etc.
Class III	Skilled occupations: — (a) Mineworkers, hewers, getters, underground engine drivers, etc. (b) Transport workers, 'bus drivers, engine drivers, shunters, signalmen, etc. (c) Clerical workers, shorthand typists, secretaries, etc. (d) Defence services, other ranks. (e) Others, *e.g.* Blacksmiths, plumbers, fitters, bricklayers, plasterers, tailors, market gardeners, etc.
Class IV	Partly skilled occupations: — (a) Agricultural workers and gardeners. (b) Others, *e.g.* Iron foundry labourers, solderers, braziers, stokers, etc.
Class V	Unskilled occupations: — (a) Building and dock labourers. (b) Others, *e.g.* Porters, engineers' labourers, hawkers, kitchen hands.
Class X	No known gainful occupation.

Dependants in our tables have been classified according to the occupation of their breadwinners.

Births. The number of births was 31 more than the previous year and so for the first time there has been a check in the decline of the birth rate which began in 1947: —

	1946	1947	1948	1949	1950	1951
Births	721	752	631	565	545	576
Birth rate	20.8	21.9	18.3	16.6	15.5	16.1
Birth rate (England and Wales)	19.2	20.5	17.8	16.7	15.8	15.5

The halt in the decline of the birth rate may be due to: —

(i) the building of 284 dwellings in Dartford Rural District in 1950, compared with 173 in 1949;

(ii) the gift of a young child-bearing population by Dartford Borough, whose Temple Hill Estate in early 1951 reached into the Rural District by 100 dwellings;

(iii) the return to a later peacetime marriage age being almost completed;

(iv) less incentive for women to work outside the home, *e.g.* restrictions imposed on day nursery accommodation.

Illegitimate births numbered 21 compared with 24 in 1950 and gave an illegitimacy rate of 37 per 1,000 live births. The rates for Dartford, Maidstone, Oxford, and England and Wales are 21, 68, 75 and 47 respectively.

With the present expectation of life at birth the annual number of births in 1951, if continued, would maintain a population of 297 x 66 = 19,600 males and 279 x 71 = 19,800 females = 39,400 persons.

Of the 576 births 546 were registered with the Local Registrars in Dartford and the Deputy Superintendent Registrar has kindly provided us with the following classification: —

Social status of father:		
Class I	19	4%
„ II	59	11%
„ III	305	55%
„ IV	108	20%
„ V	52	10%
	543	100%
Unclassified (illegitimate)	3	
	546	
Born at home	151	28%
Born in hospital	395	72%
	546	100%

In England and Wales 37% of babies were born at home in 1951 and in Kent, 39%. In Holland in 1950 81% of babies were born at home. It is questionable whether the provision of hospital accommodation for normal maternity cases, simply because the mother prefers to have her baby in hospital, is justified.

DEATHS. There were 427 deaths in 1951, *i.e.,* 93 more than the previous year and no doubt this increase was due to the almost nation-wide influenza epidemic of early 1951, a feature of which was a rise in the number of deaths from all causes: —

	1947	1948	1949	1950	1951
Deaths	391	342	321	334	427
Death rate (Rural District)	10.9	9.5	9.0	9.2	11.4
„ „ (England and Wales)	12.3	11.0	11.8	11.6	12.5

Quarterly number of deaths: —

Quarter.	1st	2nd	3rd	4th	Total
1949	95	91	70	65	321
1950	101	76	89	68	334
1951	144	96	90	97	427

The increased death rate affected almost all age groups. The deaths at the ages of 65 and over and 75 and over were 278 and 161, *i.e.,* 65% and 38% of all deaths respectively, compared with 229 and 145, *i.e.,* 69% and 45% in 1950.

175 deaths occurred in hospital and 252 at home. For those aged 75 and over there were 56 in hospital and 105 at home.

The social status of deaths may be of interest: —

	Males.	Females.	Total.	%
Class I	7	7	14	3
„ II	35	25	60	15
„ III	70	59	129	32
„ IV	61	55	116	29
„ V	50	35	85	21
Unclassified	9	14	23	—
	232	196	427	100

CAUSES OF DEATH. The main causes may be summarised: —

		1950	1951
All causes of death		336 (100%)	427 (100%)
Main causes of death		266 (79%)	348 (82%)
(440–468)	Diseases of circulatory system	138 (41%)	173 (41%)
(140–205)	Cancer, including Hodgkin's disease, Leukæmia and Aleukæmia	68 (20%)	65 (15%)
(330–334)	Vascular lesions affecting Central Nervous System ...	34 (10%)	55 (13%)
(470–527)	Diseases of respiratory system	26 (8%)	56 (13%)

Causes of death other than the main causes only increased from 70 to 79 so the above figures show that the rise in the death rate was due to an increase in the main causes other than cancer. This harmonises with the idea that it was influenza, mostly unrecorded, that produced the increase. 30 of the 56 deaths from diseases of the respiratory system occurred in the first quarter.

Cancer of the Lung. This caused 11 deaths which gives a death rate of 0·3, compared with 0·46 for London and 0·30 for England and Wales.

Coronary Disease. There was an increase from 36 in 1950 to 54 in 1951, giving a death rate of 1·4, the same as that for London. 10 cases belonged to social class V. All except one were aged 45 and over.

Motor Vehicle Accidents. In 1950 we gratefully recorded that we had no deaths from this cause. In 1951 there was a toll of 9.

Some motor vehicle " accidents " are not accidents as a preventable cause is evident and there has been no attempt to foresee that cause.

After an accident the human distress is quickly removed from view and road users continue to take chances with consequent repetitions of the accident. Where cycle tracks are provided cyclists continue to ride on the congested trunk road. When plain clothes traffic patrols are instituted there is an outcry against them.

Road traffic victims form a silent minority and a keener imagination is required to give them consideration in finding a solution to this adult behaviour problem. With apologies therefore for what may seem bad taste I give here extracts from the returns of death from this cause: —

Sex.	Age.	Cause of Death.
Male	64	Shock and hæmorrhage due to fractured skull due to being knocked down by a motor cycle on a public highway.
Male	78	Shock from multiple injuries due to being knocked down by a motor car whilst a pedestrian on a public highway.
Female	76	Shock and hæmorrhage due to multiple injuries (fractured spine, fractured pelvis, fractured tibia and fibula) due to being knocked down by a motor car in motion on a public highway.
Male	66	Multiple injuries received in collision with a motor lorry while driving a motor car.
Female	47	Broncho-pneumonia associated with cerebral contusions and fractured skull caused by being knocked from her pedal cycle by a motor cycle.
Male	53	Shock and hæmorrhage due to rupture of the aorta following injuries received after being knocked down by a private motor car on a public highway.
Male	22	Cerebral contusions due to compound fracture of rt. parietal bone of skull due to being run over by a lorry.
Male	24	Shock from multiple injuries following a collision with a stationary motor lorry on a public highway whilst riding a motor cycle.
Female	15	Shock and hæmorrhage due to fractured skull caused by being knocked down by a motor car.

ALL OTHER ACCIDENTS. Two of the deaths from this cause were due to accidents in the home.

DEATHS RELATING TO WELFARE OF MOTHER AND INFANT. No deaths occurred due to pregnancy or childbirth. Still births increased from 9 to 12 but the rate remained less than that for England and Wales.

11 of the 13 infant deaths occurred within the first 2 days of life and the main cause of death was prematurity. The remaining 2 infant deaths occurred from pneumonia, one in a two-months old infant who had not thrived since birth and the other in January in a four-month old of whom we have no details. All infant deaths, except the one from neglect at birth, occurred in hospital. The infant death rate dropped to a level below that of England and Wales and is the lowest recorded in this District.

PREVALENCE OF INFECTIOUS DISEASE.

PNEUMONIA. Notifications increased from 25 in 1950 to 32 in 1951. Of these 9 were notified in January, and 8 in February; 11 were for influenzal pneumonia. Of the 23 deaths, 11 occurred in the first quarter; only 5 were under the age of 65, and only one was notified in life. The 6 deaths from influenza were due to influenzal pneumonia, 3 in January and 3 in February; only 2 were notified in life.

WHOOPING COUGH. Notifications increased from 93 to 121, of which 69 were notified in the first quarter. 69 notifications referred to toddlers under 5, one of whom died.

MEASLES. Notifications increased from 199 to 637, the infection arriving from Dartford Borough at the end of 1950. Most cases occurred in the first quarter. Around London measles has a two-yearly rhythm and 1950-1 was an epidemic season, our figures being: —

		November.	December.	January.	February.	March.	April.
1950-51	...	16	102	67	127	150	78
1949-50	...	—	—	1	—	—	—

Although 301 cases occurred in toddlers under five no deaths occurred.

POLIOMYELITIS. All four cases were paralytic and occurred at the following times and places: July, Temple Hill; September, South Darenth; October, Stone and Hawley.

PARATYPHOID FEVER. The two cases occurred in July and were part of an outbreak of 38 cases, the remainder of which occurred in the neighbouring Districts and Boroughs and in Brighton. A common article of food in each case was synthetic cream used by a firm in a neighbouring Borough. The cream was withdrawn from sale, but when inquiries had been completed it was not known how this cream had become infected.

The germ causing the infection was a strain of Paratyphoid "B" which hitherto had not been met at the reference laboratory and became named the "Kent" strain.

When the first case was notified in this District the practitioners were circulated and informed of the position. Under the care of one practitioner was a child with a puzzling fever and rash, and stools from this child were thereupon submitted for examination. These were reported positive for Paratyphoid "B" and the child was admitted to hospital. The stools of the mother, father, brother and sister were then examined as routine and all were reported positive. Although the father incurred financial loss (he was earning about £12 a week and I could only get him £3 sickness benefit) he and the rest of the family, though in apparent good health. agreed to be admitted to the infectious disease wards of the hospital to be treated for their carrier state.

FOOD POISONING. There were six incidents. In three no causal agent was found; these were (i) a sporadic case, (ii) a family outbreak, (iii) a case from an outbreak occurring outside this District. The brief details of the three other incidents were: —

(iv) In March Mr. A. became severely ill. He had eaten a duck egg eight hours before and another fifty-six hours before. S. typhimurium grown from stools. 2 other members of family found to be symptomless excretors. Duck eggs from same batch negative on culture. Thirty dozen eggs from same batch sold in the neighbourhood.

(v) In July Mrs. M. became suddenly ill. S. typhimurium grown from stools. Had eaten a duck egg 12 hours before and the egg was laid by the one and only family duck. Cloacal swabs from the duck found negative. Later the duck was killed, and the gut and oviduct cultured but results were negative. Mr. N. who had received hens' eggs from Mrs. M.'s flock, was taken ill 3 days later and S. typhimurium were grown from his stools. Cloacal swabs from M.'s seven hens, which were in the same run as the duck, were negative. It is difficult not to suspect the duck as the origin of the above incident and perhaps in future we should take blood from such fowls for agglutination tests. Mrs. M., who was also a diabetic, died.

(vi) An infant of a nomadic family living in a caravan. S. thomson infection. The unfortunate infant died.

The abdominal pain of one of the above cases was first dealt with as appendicitis and S. typhimurium was revealed later on stool culture. Conversely when a family contact of the symptomless excretors developed abdominal pain there was at first a delay pending stool culture, but before the results arrived events demanded an operation which revealed appendicitis.

TUBERCULOSIS OF RESPIRATORY SYSTEM. Notifications decreased from 39 males and 24 females in 1950 to 9 males and 9 females in 1951, which is the lowest figure of post-war years. Some of this reduction may, however, result from poor notification. The reduction in males is in all age groups, but in the females it is mostly in the 15-25 age group.

Deaths fell from 15 to 7 which gives a rate of 0·19, almost half that of London. Two deaths were not notified in life. The reduction in the death rate from respiratory tuberculosis increases the importance of the environmental problems of this disease as patients who formerly would have died now live to expose others to the possibility of infection.

OTHER FORMS OF TUBERCULOSIS. Notifications increased from 3 to 8 and deaths from 0 to 1. 4 notifications were for inflamed glands of neck, 3 for tuberculosis of the spine and 1 for tuberculosis of the eye. The death was due to tuberculosis of the kidney and was unnotified.

About 30% of non-respiratory tuberculosis in England and Wales is from cows harbouring the infection. This 30% is an average between a lower percentage in densely populated towns where milk supplies are pasteurised and a much higher percentage in sparsely populated rural areas where raw and undesignated milk supplies are common.

4 samples of milk were submitted for biological tests in 1951 and 1 showed the organisms of tuberculosis to be present. Examination of the herd of this producer by the Veterinary Officer revealed a cow with an indurated udder which was subsequently slaughtered. The milk from this herd was undesignated and sold raw. Later tuberculosis of the neck glands, and of the spine were notified in children from two families each taking this milk supply.

IMMUNISATION AGAINST DIPHTHERIA. Primary inoculations in 1951 slightly increased in number. Reinforcing inoculations increased from 179 in 1950 to 514 in 1951. This latter figure varies with whether any special visit is made to the schools for this purpose.

The number of primary inoculations carried out in 1951 of those born since the beginning of 1949 related to the average annual number of births will give an idea of the acceptance rate. 348 such children were inoculated and 560 was the annual average of births, which gives an acceptance rate of 62%. Those entering school who were reimmunised numbered 165 which, similarly related to 560, means that 30% of such children received reinforcing inoculations.

On this subject the C.M.O. of the Ministry states " It is not perhaps sufficiently understood by parents that protection in the first year of life and reinforcing doses of prophylactic in later years are just as necessary in the absence of outbreaks of diphtheria as in their presence, and that unless the proportion of the population immunised is kept up to the 70 per cent. level, the prevention of epidemic diphtheria cannot be reasonably assured. Moreover . . . immunity against diphtheria takes some weeks to develop and in consequence the only adult members of a community exposed to diphtheria who can expect to obtain rapid protection by immunisation . . . are those who have been inoculated earlier in life. With the decline in incidence of diphtheria, and the consequent decrease in the number of persons who develop immunity through sub-clinical infection, the importance of inoculation as a means of protection is greatly increased."

No diphtheria case occurred in 1951 for the third year in succession.

VACCINATION AGAINST SMALLPOX. The number shows an increase on the previous year, no doubt due to the stimulus of the Brighton smallpox outbreak. Calculating the acceptance rate means making assumptions and the results may be unreliable; the workings by three methods are therefore shown in full: —

(a) The number of births in 1951 was 576 ∴ the number of infants under 1 year of age on 31st December, 1951, was 576.

Average age of infant vaccination is 4½ months ∴ number of infants under 1 year of age eligible for vaccination born in 1951 is 576 x 7½/12 = 360

Returns show 192 vaccinated out of 360 eligible ∴ acceptance rate = 192/360 x 100 = 53%.

Acceptance rate for 1950 by this method was 45%.

(b) Returns show number vaccinated in 1951 under 5 years of age on December 31st was 310.

By sample survey 96% of these can be assumed to have been vaccinated before their first birthday = 298.

Infants eligible are those born between mid-August 1950 and 1951 = 560.

Of the latter, 298 were vaccinated ∴ acceptance rate = 298/560 x 100 = 53%.

Acceptance rate for 1950 by this method was 44%.

(c) 192 who were under 1 year of age on 31st December, 1951, were vaccinated in 1951, *i.e.* (?) 192 vaccinations under 1 year of age were carried out in 1951

Infants eligible were those born in the 12 months ending 30th June, 1951 = 560.

∴ 192 were vaccinated out of 560 eligible.

∴ Acceptance rate = 192/560 x 100 = 34%.

The last method which is faulty in the second premise seems to be followed in the Ministry's report for 1950 and the rate for England and Wales calculated thereby is 24%.

HOUSING. Houses completed in 1951 were 174 by the Council and 18 by Private Enterprise. 251 and 33 were the figures for 1950.

The houses demolished were also fewer; 9 in 1951 compared with 19 in 1950.

Items in the Chief Sanitary Inspector's report such as 47 roofs and 18 floors repaired and dampness abated in the walls of 50 dwellings illustrate the amount of repair work being called for. The item " external walls repaired . . 1 " refers to the re-building of the entire end wall of a terrace.

The repair and maintenance of existing dwellings, many of which have outlived their normal life, calls for more attention, yet the number of sanitary inspectors is only sufficient to inspect houses as a result of complaint. The fitness of the housing for human habitation and the extent of overcrowding remains unsurveyed.

Our thankfulness in seeing attractive new housing has in recent times been expressed by two pleasant opening ceremonies. It would, however, give a more balanced picture if similar attention were given to the fact that this Council cannot yet see its way to provide for the unspectacular work of routine periodic housing inspections.

WATER SUPPLIES. FLUORINE. Mention was made in the last report that the absence of fluorine in our water supply might deny our children of a means of protection against the decay of their teeth. The matter has since been taken up with the Ministry who are awaiting the report of their team studying the subject in U.S.A.

NITRATES. Nitrates in well waters are due to distant pollution and in some cases due to the strata through which the water has seeped before arriving at the well. A figure for nitrate content is given in all chemical analyses of water samples in view of its value as an indicator of distant pollution. Hitherto the nitrate itself has been regarded as harmless.

In 1951, 3 infants from rural Suffolk and 1 from rural N. Ireland were reported to have their blood pigment damaged through the ingestion of bottle feeds made up from well water with a high nitrate content and 1 infant died (methæmoglobinæmia). Numerous such cases have been reported from rural areas of N. America. Apparently the condition is not difficult to treat but its rarity may prevent recognition.

As we have a few domestic shallow wells in the district the nitrate figures of all reports supplied by the County Analyst have been summarised. 20 parts per million of nitrate nitrogen has been suggested as the highest acceptable figure in water used for preparing an infant's milk mixture. The highest figure in the 100 reports summarised was 17 parts per million.

DRAINAGE. Water closets and cesspool drainage were substituted for pail closets or privy pits in a score of dwellings. Another score of existing dwellings were connected to the sewer and their cesspools demolished, the persuasion and guidance given to the owners in such cases being a time-consuming business.

Unlike previous years there was no extension of the sewer and over 2,000 cesspools continued to keep our three cesspool emptying vehicles on the move.

The exalted social status enjoyed by the water closet as a mark of sanitary excellence is now being questioned. Apart from the postural indolence engendered by the common pedestal type, biologists are drawing attention to the wastefulness of the water carriage system in using wholesome water to carry away to the sea excreta which should be returned to the soil. Unfortunately, excreta may contain the organisms of typhoid fever, dysentery, tuberculosis or other diseases, and what we require is a method of getting it back to the soil that is safe. The replacement of the horse by the tractor, the bald patches of chalk appearing through the thin top-soil on the hills and the use of fertile land for housing suggests that there is something worthwhile in this argument.

ATMOSPHERIC POLLUTION. The exasperation caused by dust from cement works will make us biassed in our interpretation of data which attempt to measure the amount of air pollution, so, with permission, the records of a health resort and the centre of an industrial city have been summarised alongside our own for comparison. Our own figures seem more akin to those of the health resort than to those of the industrial city. However, we do not know the local circumstances of areas other than our own and such comparison should only be made with caution.

Our two largest parishes, Stone and Sutton-at-Hone, have populations which are large enough to provide death rates which will not be made meaningless through chance. Stone parish has most of its population living in the vicinity of the cement factories and many are employed by that industry. Sutton-at-Hone parish, on the other hand, has most of its population concentrated around Swanley 5 or 6 miles away from the cement producing area. Atmospheric pollution is associated with respiratory disease and in a year notable for its influenza the numbers of deaths and the death rates of these two parishes may be of interest: —

Quarter.	1st.	2nd.	3rd	4th.	Year.	Crude Death Rate.
Sutton-at-Hone Population 8,100 ...	40	26	19	18	103	13
Stone Population 6,600 ...	19	14	13	22	68	10

It must be remembered that these crude death rates make no allowance for the age structure of the populations being compared which is unknown. My impression is that there are more old persons living in the parish of Stone than in the parish of Sutton-at-Hone.

ICE CREAM. At the beginning of 1951 it was thought that more samples for methylene blue test should be taken from mobile vendors and that as most ice cream was sold at weekends samples so far as possible should be taken at that time. For this purpose a refrigerator, which would maintain the samples at —10°C. until the laboratory was open, was purchased. Contrary to expectations the 1951 results, 67% of which were samples taken on Saturdays, Sundays and Bank holidays, showed an improvement on the previous year: —

NUMBER AND PERCENTAGE OF SAMPLES.

	1948		1949		1950		1951	
Grade I ...	7	37%	12	26%	13	61%	56	74%
„ II ...	2	11%	17	36%	3	15%	12	16%
„ III ...	4	21%	2	4%	4	19%	5	7%
„ IV ...	6	31%	16	34%	1	5%	2	3%
TOTAL ...	19	100%	47	100%	21	100%	75	100%

THE BOROUGH AND THE RURAL DISTRICT.

BIRTHS. The post-war decline continued in the Borough but in the Rural District this was checked and a rise occurred. The 1951 adjusted rates were 13·4 and 16·1 and the numbers 562 and 576 respectively.

The difference in numbers, 14, is, curiously, the same as the number of births occurring in the 100 houses newly occupied by tenants from the Borough for whom they were built, but even adjusting for this the difference in the trend of the birth rates remains.

The age constitution of the two populations is similar but there is a slightly higher proportion of women aged 18 to 44 in the Borough than in the Rural District (C.Fs. 0·96 and 1·05).

USE OF HEALTH SERVICES. The Rural District differs from the Borough in that half its population is rural, it contains a greater proportion of agricultural and unskilled labourers, and distance influences the use to which the health services are put. This is illustrated by the following comparisons: —

			Borough. (pop. 40,050)	Rural District. (pop. 37,520)
Births in hospital			83%	72%
Acceptance rate.	Vaccination		73%	53%
,, ,,	Diphtheria Prim.		73%	62%
,, ,,	,,	Reinf. (at school entry)	57%	30%
Deaths in hospital			47%	41%
Hours worked by home helps in sample week (w.e. 2/11/52)			1,350	521

INFLUENZA. Distance from doctor, nurse, home help and voluntary worker will exert its influence chiefly in winter and the outstanding feature of the winter of 1951 was the visitation of influenza illustrated by the accompanying graph. This epidemic throughout the country was characterised by an increase in the death rate from all causes. The statistics here were as follows: —

NOTIFICATIONS.

		Borough.		Rural District.	
		Influenzal Pneumonia.	Primary Pneumonia.	Influenzal Pneumonia.	Primary Pneumonia.
1950,	1st Quarter	0	8	1	8
	2nd, 3rd and 4th Quarters ...	1	7	2	15
	Whole Year	1	15	3	23
1951,	1st Quarter	26	5	11	7
	2nd, 3rd and 4th Quarters ...	0	19	0	14
	Whole Year	26	24	11	21

DEATHS from (i) Respiratory Diseases (*i.e.* Influenza, pneumonia, bronchitis and other diseases of resp. system).
(ii) All causes.

	Borough (Pop. 40,050)		Rural District (Pop. 37,520)	
	Resp. Diseases.	All Causes.	Resp. Diseases.	All Causes.
1950, 1st Quarter	14	122	16	101
2nd ,, ...	7	81	2	76
3rd ,, ...	4	89	4	89
4th ,, ...	16	98	6	68
	41	390	28	334
1951, 1st Quarter	30	134	30	144
2nd ,, ...	2	80	14	96
3rd ,, ...	3	64	6	90
4th ,, ...	6	94	7	97
	41	372	57	427

ADJUSTED DEATH RATES ALL CAUSES.

	Borough.	Rural District.	England. and Wales.
1950, 1st Quarter	12·3	11·0	14·0
2nd ,, ...	8·2	8·2	11·1
3rd ,, ...	9·0	9·7	9·3
4th ,, ...	9·9	7·4	12·3
Year	9·9	9·2	11·6
1951, 1st Quarter	13·6	15·3	19·1
2nd ,, ...	8·2	10·2	11·1
3rd ,, ...	6·5	9·6	9·1
4th ,, ...	9·6	10·3	11·0
Year	9·5	11·4	12·5

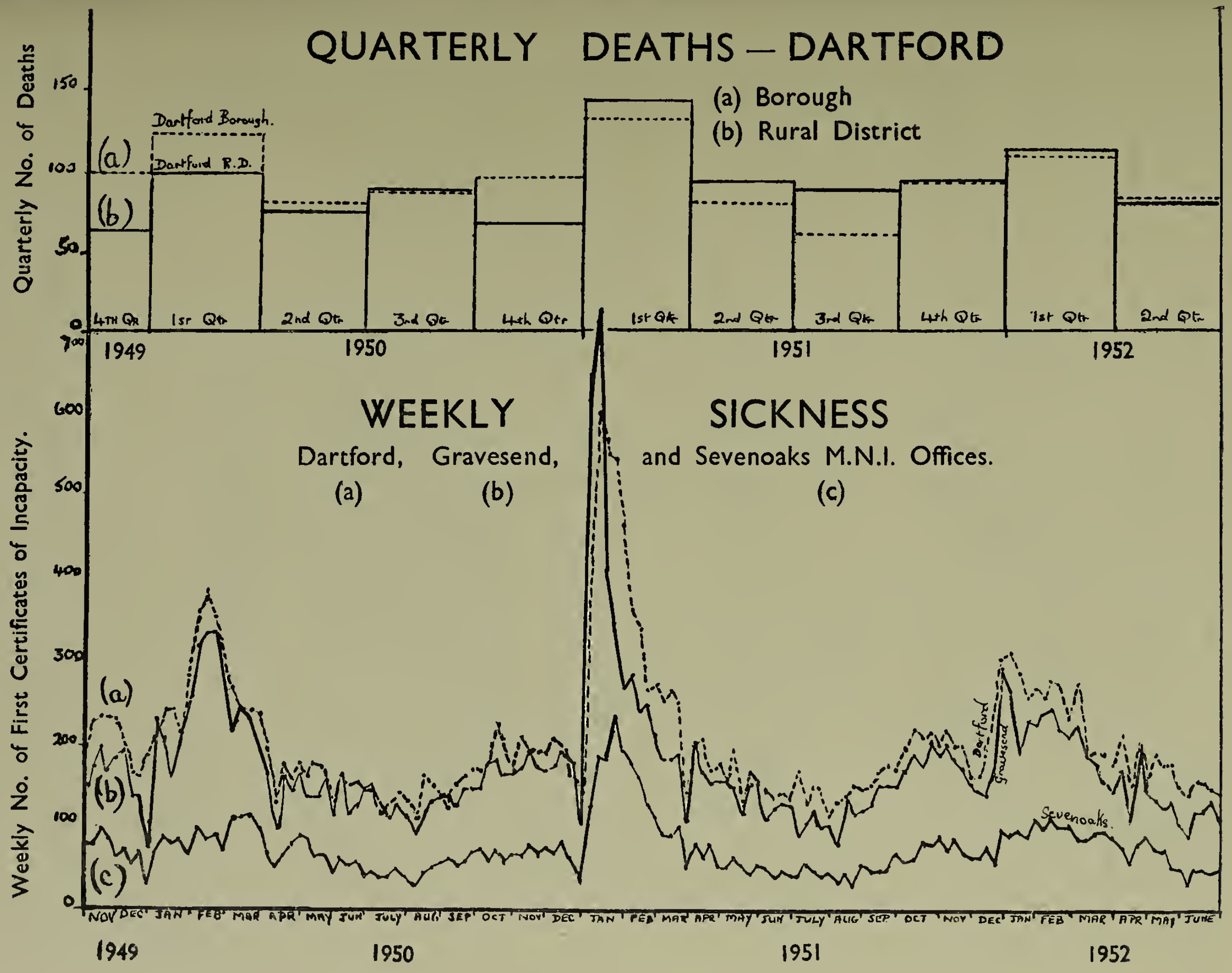
Only a complication, pneumonia, is notifiable in influenza and even this is incompletely notified. This and the play of chance on small numbers makes only a vague outline of fact visible in the above figures. This seems to be as follows:—

The Borough was afflicted with influenza as badly as, if not worse than, the Rural District.

Increase in deaths from the respiratory diseases during the epidemic was somewhat greater in the Rural District than in the Borough.

Deaths from all causes increased much more in the Rural District than in the Borough. In the first quarter the Rural District showed a 41% increase compared with 11% for the Borough and 37% for England and Wales.

This larger increase in the Rural District was due to the insidious unrecognised effect of influenza on those infirm with other diseases to whom the health services and voluntary organisations are more inaccessible than in the Borough.


QUARTERLY DEATHS — DARTFORD
(a) Borough
(b) Rural District
Quarterly No. of Deaths
150
100
50
0
Dartford Borough.
Dartford R.D.
(a)
(b)
4TH QR
1st Qtr
2nd Qtr
3rd Qtr
4th Qtr
1st Qtr
2nd Qtr
3rd Qtr
4th Qtr
1st Qtr
2nd Qtr
1949
1950
1951
1952
WEEKLY SICKNESS
Dartford, Gravesend, and Sevenoaks M.N.I. Offices.
(a) (b) (c)
Weekly No. of First Certificates of Incapacity.
700
600
500
400
300
200
100
0
(a)
(b)
(c)
Dartford
Gravesend
Sevenoaks.
NOV DEC JAN FEB MAR APR MAY JUN JULY AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JULY AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUNE
1949
1950
1951
1952

ACKNOWLEDGMENTS. Several statements in this report owe their origin to official and unofficial publications and these are available for consultation.

My thanks are due to a number of colleagues in providing information and in particular to the local Deputy Superintendent Registrar and Local Registrars of Births and Deaths.

I wish to thank the Chairman and Members of the Public Health Committee for their interest and support and the Staff of this Department for their willing co-operation.

I am, Madam, Ladies and Gentlemen,

Your obedient servant,

JOHN H. HUDSON,

Medical Officer of Health.

SOCIAL CONDITIONS.

Area in acres	34,113
Population (Registrar-General's estimated mid-year home population 1951)	37,520
Population (Census 1931)	31,253
Number of inhabited houses (Rate Book 31/12/51)	10,893
Rateable Value	£250,234
Sum represented by 1d. rate (31/3/52)	£1,069

The age and sex distribution is akin to that of England and Wales. The comparability factor for births, governed by the proportion of women aged 18 to 44, is 1·05. That for deaths, governed by the proportion of all age groups, is 1·00. The crude birth or death rate of any local area multiplied by its comparability factor makes it comparable with the crude rate for England and Wales and with that for another local area which has been adjusted by its own comparability factor.

The Registrar-General's estimate of the child population for mid-1951 (reproduced by permission of The Controller, H.M. Stationery Office) is:—

0—4 years ...	3,181	5—15 years ...	5,304

No change has occurred in the social conditions since attempts made to describe them in previous reports. The following may help as indicators for 1951:—

Cases dealt with by N.S.P.C.C.:	
Neglect	16
Advice Sought	5
Ill-treatment	2
Moral danger	2
Adults involved	34
Children involved	76
Convictions	3
Unemployed on 31st December, 1951 (Dartford Borough and Rural District)	150
Percentage uptake welfare vitamin preparations (Dartford Borough and Rural District)	30
Approximate annual cost of hospital services serving Dartford Rural District (based on national figure)	£200,000
Distributors of undesignated milk	2

VITAL STATISTICS.

Live Births.

	Males.	Females.	Total.
Legitimate	284	271	555
Illegitimate	13	8	21
	297	279	576

Crude Live Birth Rate per 1,000 estimated home population	15·4
Birth Rate adjusted for females aged 18-44 in population*	16·1
Crude Live Birth Rate per 1,000 estimated home population, England and Wales, 1951	15·5

* Women in mental hospitals and similar institutions excluded.

Still Births.

	Males.	Females.	Total.
Legitimate	6	4	10
Illegitimate	1	1	2
	7	5	12

Still Birth Rate per 1,000 (live and still) births	20·5
Still Birth Rate per 1,000 (live and still) births, England and Wales	22·7

Deaths from All Causes.

Males.	Females.	Total.
232	195	427

Crude Death Rate per 1,000 estimated civilian population	11·4
Death Rate adjusted for age and sex by comparability factor	11·4
Crude Death Rate per 1,000 estimated home population, England and Wales	12·5

Deaths from Puerperal Causes.	Number.	Rate per 1,000 Total (Live and Still) Births.
Deaths from Puerperal Causes, Dartford Rural District	0	0
Deaths from Puerperal Causes, England and Wales	559	0·79

Deaths of Infants under one year of age.

	Males.	Females.	Total.
Legitimate under 4 weeks	7	3	10
,, over 4 weeks	1	1	2
Illegitimate under 4 weeks	1	0	1
	9	4	13

Death Rate of Infants under 1 year of age:

All infants per 1,000 live births	22·6
Legitimate infants per 1,000 legitimate live births	21·6
Illegitimate infants per 1,000 illegitimate live births	47·7
All infants per 1,000 related live births, England and Wales	29·6
All infants per 1,000 related live births, London and South-East Region	24·1
All infants per 1,000 live births, Sweden	21
All infants per 1,000 live births, Irish Republic	46

CAUSES OF DEATH.	NUMBER.	AGE AT DEATH.
Prematurity	6	2 days or less.
Pneumonia, primary or influenzal	2	2 and 4 months.
Injury at birth	1	1 day.
Atelectasis	1	16 hours.
Congenital malformation	1	15 hours.
Erythroblastosis	1	2 hours.
Lack of attention at birth	1	Newly born.
	13	

CLASSIFICATION OF CAUSES OF DEATH ACCORDING TO SEX.

Registrar General's Return.

	Male.	Female.	Persons.	
All causes	232	195	427	
Tuberculosis, respiratory	6	1	7	
Tuberculosis, other	1	—	1	
Syphilitic disease	—	—	—	
Diphtheria	—	—	—	
Whooping cough	1	—	1	
Meningococcal infections	—	—	—	
Acute poliomyelitis	—	—	—	
Measles	—	—	—	
Other infective and parasitic diseases	—	1	1	
Malignant neoplasm, stomach	6	5	11	65
Malignant neoplasm, lung, bronchus	10	1	11	
Malignant neoplasm, breast	—	6	6	
Malignant neoplasm, uterus	—	3	3	
Other malignant and lymphatic neoplasms	22	9	31	
Leukæmia, aleukæmia	2	1	3	
Diabetes	—	1	1	
Vascular lesions of nervous system	27	28	55	55
Coronary disease, angina	27	27	54	173
Hypertension with heart disease	9	10	19	
Other heart disease	43	45	88	
Other circulatory disease	7	5	12	
Influenza	3	3	6	56
Pneumonia	8	15	23	
Bronchitis	16	9	25	
Other diseases of respiratory system	1	1	2	
Ulcer of stomach and duodenum	3	1	4	
Gastritis, enteritis and diarrhœa	1	1	2	
Nephritis and nephrosis	3	2	5	
Hyperplasia of prostate	3	—	3	
Pregnancy, childbirth, abortion	—	—	—	
Congenital malformations	1	2	3	
Other defined and ill-defined diseases	17	15	32	
Motor vehicle accidents	6	3	9	
All other accidents	5	—	5	
Suicide	3	—	3	
Homicide and operations of war	1	—	1	

CLASSIFICATION OF CAUSES OF DEATH ACCORDING TO AGE.

Compiled Locally.

	All Ages	Under 4 Weeks	4 Weeks to 1 Year	1—2	2—5	5—15	15—25	25—35	35—45	45—55	55—65	65—75	75+
All causes	427	11	2	4	2	1	8	8	14	36	63	117	161
Tuberculosis, respiratory ...	8	—	—	—	—	—	—	2	1	1	2	1	1
Tuberculosis, other	1	—	—	—	—	—	—	—	1	—	—	—	—
Syphilitic disease	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping cough	1	—	—	1	—	—	—	—	—	—	—	—	—
Meningococcal infection ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	—	—	—	—	—	—
Other infective and parasitic diseases	1	—	—	—	—	—	—	—	—	1	—	—	—
Malignant neoplasm, stomach	10	—	—	—	—	—	—	—	1	1	2	5	1
Malignant neoplasm, lung, bronchus	9	—	—	—	—	—	—	—	—	2	1	6	—
Malignant neoplasm, breast ...	6	—	—	—	—	—	—	—	—	—	4	2	—
Malignant neoplasm, uterus ...	3	—	—	—	—	—	—	—	1	2	—	—	—
Other malignant and lymphatic neoplasms	30	—	—	—	—	—	—	—	2	—	7	11	10
Leukæmia, aleukæmia ...	3	—	—	—	—	—	—	—	1	1	—	1	—
Diabetes	—	—	—	—	—	—	—	—	—	—	—	—	—
Vascular lesions of nervous system	55	—	—	—	—	—	—	—	—	4	7	17	27
Coronary disease, angina ...	57	—	—	—	—	—	—	1	—	6	11	20	19
Hypertension with heart disease	14	—	—	—	—	—	—	—	—	—	2	6	6
Other heart disease	87	—	—	—	—	—	1	2	3	2	11	14	54
Other circulatory disease ...	14	—	—	—	—	—	—	—	—	4	2	2	6
Influenza	6	—	1	—	—	—	—	—	2	—	1	2	—
Pneumonia	23	—	1	1	—	—	—	1	—	1	1	8	10
Bronchitis	24	—	—	—	—	—	1	—	—	1	3	10	9
Other diseases of respiratory system	4	—	—	—	—	—	—	—	—	1	1	1	1
Ulcer of stomach and duodenum	4	—	—	—	—	—	—	—	—	1	—	2	1
Gastritis, enteritis and diarrhœa	3	—	—	1	—	—	—	—	—	—	1	—	1
Nephritis and nephrosis ...	4	—	—	—	1	—	—	—	—	—	—	2	1
Hyperplasia of prostate ...	2	—	—	—	—	—	—	—	—	—	—	2	—
Pregnancy, childbirth, abortion	—	—	—	—	—	—	—	—	—	—	—	—	—
Congenital malformations ...	2	1	—	—	—	—	—	1	—	—	—	—	—
Other defined and ill-defined diseases	37	9	—	—	1	—	1	1	1	3	5	4	12
Motor vehicle accidents ...	8	—	—	—	—	—	2	—	—	2	1	1	2
All other accidents	7	1	—	1	—	1	2	—	—	1	1	—	—
Suicide	3	—	—	—	—	—	—	—	1	2	—	—	—
Homicide and operations of war	1	—	—	—	—	—	1	—	—	—	—	—	—

CLASSIFICATION OF CAUSES OF DEATH ACCORDING TO SOCIAL CLASS.

MALES.	All Classes	I	II	IIIa	IIIb	IIIc	IIId	IIIe	IVa	IVb	Va	Vb	X
All causes	232	7	35	—	6	4	1	59	41	20	11	39	9
Tuberculosis, respiratory	7	1	1	—	—	—	—	2	1	—	—	1	1
Tuberculosis, other ...	1	—	—	—	1	—	—	—	—	—	—	—	—
Whooping cough ...	1	—	—	—	—	—	—	—	—	1	—	—	—
Malignant neoplasm, stomach	6	—	3	—	—	—	—	1	1	—	—	1	—
Malignant neoplasm, lung, bronchus ...	8	—	—	—	1	—	—	4	2	—	—	1	—
Other malignant and lymphatic neoplasms	21	—	2	—	—	—	—	6	4	1	3	5	—
Leukæmia, aleukæmia ..	2	—	—	—	—	—	—	2	—	—	—	—	—
Vascular lesions of nervous system ...	26	—	8	—	—	—	—	6	2	3	2	5	—
Coronary disease, angina	29	—	2	—	1	1	—	12	3	1	1	6	2
Hypertension with heart disease	8	—	1	—	—	1	—	2	2	—	1	1	—
Other heart disease ...	43	2	5	—	—	2	—	11	9	4	2	4	4
Other circulatory disease	8	2	1	—	—	—	—	—	1	1	—	3	—
Influenza	3	—	—	—	—	—	—	2	—	—	—	1	—
Pneumonia	7	—	1	—	—	—	—	1	2	—	—	3	—
Bronchitis	16	1	2	—	1	—	—	1	5	3	1	2	—
Other diseases of respiratory system ...	2	—	1	—	—	—	—	—	1	—	—	—	—
Ulcer of stomach and duodenum	3	—	1	—	—	—	—	—	—	—	—	1	1
Gastritis, enteritis and diarrhœa	1	—	1	—	—	—	—	—	—	—	—	—	—
Nephritis and nephrosis	2	—	1	—	—	—	—	—	1	—	—	—	—
Hyperplasia of prostate	2	—	—	—	—	—	—	1	—	—	—	1	—
Other defined and ill-defined diseases ...	21	—	4	—	2	—	1	3	5	3	—	3	—
Motor vehicle accidents	6	—	—	—	—	—	—	2	1	2	—	1	—
All other accidents ...	5	—	—	—	—	—	—	2	1	1	—	—	1
Suicide	3	1	1	—	—	—	—	1	—	—	—	—	—
Homicide and operations of war ...	1	—	—	—	—	—	—	—	—	—	1	—	—

CLASSIFICATION OF CAUSES OF DEATH ACCORDING TO SOCIAL CLASS.

	All Classes	I	II	IIIa	IIIb	IIIc	IIId	IIIe	IVa	IVb	Va	Vb	X
FEMALES.													
All causes	195	7	25	—	3	1	2	53	31	24	6	29	14
Tuberculosis, respiratory	1	—	—	—	—	—	—	—	1	—	—	—	—
Other infective and parasitic diseases ...	1	—	—	—	1	—	—	—	—	—	—	—	—
Malignant neoplasm, stomach	4	1	—	—	—	—	—	2	1	—	—	—	—
Malignant neoplasm, lung, bronchus ...	1	—	—	—	—	—	—	—	—	—	1	—	—
Malignant neoplasm, breast	6	—	1	—	—	—	—	2	—	1	—	1	1
Malignant neoplasm, uterus	3	—	—	—	—	—	—	2	—	1	—	—	—
Other malignant and lymphatic neoplasms	9	—	2	—	—	—	—	1	2	1	1	1	1
Leukæmia, aleukæmia ..	1	—	—	—	—	—	—	—	—	—	1	—	—
Vascular lesions of nervous system ...	29	—	5	—	—	—	—	11	5	3	—	3	2
Coronary disease, angina	28	1	6	—	1	—	—	4	6	2	—	8	—
Hypertension with heart disease	6	—	—	—	—	—	—	2	1	2	—	1	—
Other heart disease ...	44	3	7	—	—	—	1	9	8	6	1	6	3
Other circulatory disease	6	—	1	—	—	—	1	3	1	—	—	—	—
Influenza	3	1	—	—	—	1	—	—	—	1	—	—	—
Pneumonia	17	1	—	—	1	—	—	5	1	—	1	3	5
Bronchitis	8	—	—	—	—	—	—	4	—	2	—	1	1
Other diseases of respiratory system ...	1	—	—	—	—	—	—	—	—	1	—	—	—
Ulcer of stomach and duodenum	1	—	—	—	—	—	—	—	1	—	—	—	—
Gastritis, enteritis and diarrhœa	2	—	1	—	—	—	—	—	1	—	—	—	—
Nephritis and nephrosis	2	—	—	—	—	—	—	1	—	1	—	—	—
Congenital malformations	2	—	1	—	—	—	—	1	—	—	—	—	—
Other defined and ill-defined diseases ...	16	—	1	—	—	—	—	4	2	3	1	4	1
Motor vehicle accidents	2	—	—	—	—	—	—	2	—	—	—	—	—
All other accidents ...	2	—	—	—	—	—	—	—	1	—	—	1	—
PERSONS.													
All causes	427	14	60	—	9	5	3	112	72	44	17	68	23

CAUSES OF DEATH AT AGES 75 YEARS AND OVER.

		Males.				Females.				
	Total	75-79	80-84	85-89	90-94	75-79	80-84	85-89	90-94	95-99
All causes	161	25	25	17	6	33	28	24	2	1
Tuberculosis, respiratory	1	—	—	—	—	1	—	—	—	—
Malignant neoplasm, stomach	1	—	—	—	—	1	—	—	—	—
Other malignant and lymphatic neoplasms	10	1	2	1	—	3	3	—	—	—
Vascular lesions of nervous system ...	27	6	1	3	1	8	2	6	—	—
Coronary disease, angina	19	4	3	1	1	4	5	—	1	—
Hypertension with heart disease	6	3	—	—	—	1	—	2	—	—
Other heart disease ...	54	8	13	8	—	9	7	8	1	—
Other circulatory disease	6	—	—	—	1	2	1	2	—	—
Pneumonia	10	—	1	1	—	1	3	3	—	1
Bronchitis	9	1	1	2	1	1	3	—	—	—
Other diseases of respiratory system ...	1	—	—	—	1	—	—	—	—	—
Ulcer of stomach and duodenum	1	1	—	—	—	—	—	—	—	—
Gastritis, enteritis and diarrhœa	1	—	—	—	—	—	—	1	—	—
Nephritis and nephrosis	1	—	1	—	—	—	—	—	—	—
Other defined and ill-defined diseases ...	12	—	3	1	1	1	4	2	—	—
Motor vehicle accidents	2	1	—	—	—	1	—	—	—	—

BIRTH-RATES, DEATH-RATES, ANALYSIS OF MORTALITY AND CASE-RATES FOR CERTAIN INFECTIOUS DISEASES IN THE YEAR 1951.

	England and Wales.	126 County Boroughs and Great Towns (including London).	148 Smaller Towns (Resident Population 25,000-50,000 at 1931 Census).	London Administrative County.	Dartford Rural District.	Dartford Borough.
BIRTHS:	Rates per 1,000 Home Population.					
Live births ...	15·5	17·3	16·7	17·8	16·1	13·4
Still births ...	0·36	0·45	0·38	0·37	0·32	0·25
DEATHS:						
All causes ...	12·5	13·4	12·5	13·1	11·4	9·5
Typhoid and paratyphoid ...	0·00	0·00	0·00	—	—	—
Whooping cough	0·01	0·01	0·01	0·01	0·03	—
Diphtheria ...	0·00	0·00	0·00	0·00	—	—
Tuberculosis ...	0·31	0·37	0·31	0·38	0·21	0·38
Influenza ...	0·38	0·36	0·38	0·23	0·16	0·15
Smallpox ...	0·00	0·00	0·00	—	—	—
Acute poliomyelitis (including polioencephalitis)	0·00	0·00	0·01	0·00	—	—
Pneumonia ...	0·61	0·65	0·63	0·61	0·61	0·40
NOTIFICATIONS (Corrected):						
Typhoid fever ...	0·00	0·00	0·00	0·01	—	—
Paratyphoid fever	0·02	0·03	0·02	0·01	0·05	0·03
Meningococcal infection ...	0·03	0·04	0·03	0·03	—	—
Scarlet fever ...	1·11	1·20	1·20	1·10	0·72	0·82
Whooping cough	3·87	3·62	4·00	3·11	3·23	4·67
Diphtheria ...	0·02	0·02	0·03	0·01	—	—
Erysipelas ...	0·14	0·15	0·12	0·15	0·11	0·30
Smallpox ...	0·00	0·00	0·00	—	—	—
Measles	14·07	13·93	14·82	14·64	16·98	9·54
Pneumonia ...	0·99	1·04	0·96	0·72	0·80	1·25
Acute poliomyelitis (including polioencephalitis)						
Paralytic ...	0·03	0·03	0·03	0·02	0·11	0·12
Non-paralytic .	0·02	0·02	0·03	0·02	—	0·15
Food poisoning ...	0·13	0·15	0·08	0·23	0·22	0·05
DEATHS:	Rates per 1,000 Live Births.					
All causes under 1 year of age ...	29·6	33·9	27·6	26·4	22·6	23·1
Enteritis and diarrhœa under 2 years of age ...	1·4	1·6	1·0	0·7	1·7	—
NOTIFICATIONS (Corrected):	Rates per 1,000 Total (Live and Still) Births.					
Puerperal fever and pyrexia ...	10·66	13·77	8·08	14·9	1·7	3·5

TREATMENT SERVICES AND PERSONAL HEALTH SERVICES.

A summary of these services has been given in our previous annual reports. There was no noteworthy change during 1951.

LABORATORY SERVICES.

The following specimens were submitted for examination: —

To Public Health and County Analyst's Laboratories:

Milk	21
Water	47
Ice Cream	87
Other Foods	4
Fæces	3

To Laboratories of Dartford Group of Hospitals:

Specimens from hens and ducks	12
Foods	4
Fæces	117

SANITARY CIRCUMSTANCES OF THE AREA.

Water.

An account of the water supplies has been given in previous reports.

At the end of 1951 the position in regard to quantity and quality was as follows: —

		Results.	
		Bacteriological.	Chemical.
10,775	houses supplied by Metropolitan Water Board and Mid-Kent Water Co.		
	Quantity Good.		
	Samples taken of water going into supply of M.K.W.C.: Excellent	11	—
	Samples taken from household taps, M.W.B. and M.K.W.C.: Good	10	2
65	houses supplied by piped supply from well in Lullingstone Park, parish of Lullingstone.		
	Quantity Satisfactory.		
	Samples: Good	1	3
	Contaminated	1	—
24	houses supplied by piped supply from well at Court Lodge Farm, parish of Horton Kirby.		
	Quantity Unsatisfactory.		
	Samples: Satisfactory	—	1
	Contaminated	1	—
9	houses supplied by piped supply from one well at Sutton House, Clement Street, parish of Sutton.		
	Quantity Satisfactory.		
	Samples: Good	1	1

		Results.	
		Bacteriological.	Chemical.
14	houses supplied by pump or bucket from adjacent wells.		
	Quantity Mostly Unsatisfactory.		
	Samples: Satisfactory	1	2
	Contaminated	2	1
6	houses supplied by rainwater.		
	Quantity Unsatisfactory.		
10,893	TOTAL HOUSES.		
2	Hospitals supplied by well.		
	Quantity Satisfactory.		
	Samples: Good	3	2
1	Factory supplied by well.		
	Quantity Satisfactory.		
	Samples: Good	1	1
2	Swimming Baths (M.K.W.C.).		
	Samples: Good	4	2

NITRATE CONTENT.

All our records of chemical analyses have been reviewed in order to obtain an idea of the nitrate content of our drinking waters. The number of samples, showing the various amounts of nitrates as nitrogen in parts per million, was as follows: —

PARTS PER MILLION.	0-5	5-10	10-15	15-20
Stored rainwater	2	1	—	—
Surface waters	8	—	—	—
Well waters, M.W.B. and M.K.W.C.	6	14	—	—
Artesian well	6	—	—	—
Lullingstone well	1	5	—	—
Other wells, mostly domestic ...	14	25	12	6

Drainage and Sewerage.

An account of the drainage and sewerage of this district was given in our previous reports. No extensions of the sewer were carried out during 1951.

New buildings accounted for 240 dwellings being connected to the Darenth Valley Main Sewer, 12 to the Stone Sewer, 24 to septic tanks and 11 to cesspools.

There were 16 existing buildings connected to the Darenth Valley Main Sewer and 3 to Stone Sewer.

The effluent from Stone Outfall Works was subjected to chemical analysis on 14 occasions and 8 of the resulting reports were satisfactory. 6 were not, but of these only one was unsatisfactory on the basis of the impurity figure. The Council have decided to provide these works with an aerating sprinkler and humus tanks, but are now prevented from doing so by the restrictions on capital expenditure imposed by the Ministry.

At the end of the year the closet accommodation was approximately as follows: —

Buildings with W.C.'s discharging into drainage system	8,553
Buildings with W.C.'s discharging into septic tanks	125
Buildings with W.C.'s discharging into cesspools	2,140
Buildings provided with pail closets	72
Buildings provided with privies	3
TOTAL ...	10,893

Atmospheric Pollution.

For the purpose of measuring atmospheric pollution a standard deposit gauge was set up in the grounds of the Southern Hospital.

The monthly readings of this gauge and those obtained by two other Local Authorities may be summarised: —

MONTH.	TOTAL SOLIDS (Tons per sq. mile per month).		
1951.	Southern Hospital, Dartford.	Leeds, Market Buildings.	Southport, Hesketh Park.
July	20·79	30·28	5·29
August	9·39	29·12	8·24
September ...	16·09	28·63	6·28
October ...	27·58	23·58	6·35
November ...	8·45	37·87	16·76
December ...	7·16	35·00	22·80
MEAN ...	14·91	30·75	10·95

SUMMARY OF WEATHER—S.E. ENGLAND.

Month.	
July:	Dry, with exception of one downpour. Prevailing wind S.W. Fresh winds 5 days. Gusts 3 days. Gauge rainfall 2·3ins.
August:	Wet. Prevailing wind S.W. Fresh winds 11 days. Gusts 5 days. Gauge rainfall 3·1ins.
September:	Wet. Prevailing wind S.W. Fresh winds 8 days. Gusts 2 days. Gauge rainfall 1·9ins.
October:	Very dry. Variable wind. Fresh winds 2 days. Gusts 2 days. Gauge rainfall 0·7ins.
November:	Very wet. Prevailing wind S.W., but variable. Fresh winds 11 days. Gusts 3 days. Gauge rainfall 3·2ins.
December:	Dry. Prevailing wind S.W. Fresh winds 9 days. Gusts 4 days. Gauge rainfall 1·7ins.

Gusts = winds more than 38 m.p.h.

DUST FROM CEMENT WORKS.

With the permission of the Controller of H.M.S.O. the following is reproduced from the Annual Report for 1951 of the Chief Inspector Alkali, etc., Works: —

" The demand for cement has continued, works having operated to full capacity and, as is inevitable in these circumstances, a number of complaints has been received. With regard to the larger works, electrical precipitation is the method most generally employed for the de-dusting of chimney gases, but for various reasons, some of which are dealt with below, the method has not always come up to our earlier expectations. Recent experience has shown that low-level emissions can be rather more serious contributors to local pollution than was at one time thought. Emissions of dust from packing and handling of clinker and cement which were at one time rightly held to be of minor importance are now often the major cause of complaint. This is in itself remarkable and an indication of progress. The cement dust problem is, however, far from being solved and, indeed, in the Thames-side region where over 4 million tons of cement are produced annually, it is probably insuperable.

Waste kiln gases should be discharged at as high a level as practicable; the two highest chimneys are those at No. 340 and No. 3108, which are 400 ft. and 340 ft. respectively. The occurrence of hydrogen sulphide is noted from time to time in the chimney gases, the concentration being as high as 1,000 parts per million, but more usually of the order of 100 to 200 parts per million. The weight of evidence is now that low back-end temperatures do not tend to the production of hydrogen sulphide so much as deficiency of oxygen in the waste gases. Hydrogen sulphide is normally either absent (or present in very low concentrations) if the oxygen content of the kiln end gases can be kept above 1 per cent. This is fortunate as the present tendency to chain intensively so as to save fuel has resulted in back-end temperatures of the order of 360°F.

Low back-end temperatures do not greatly affect dust arrestment at newly constructed works where the electrical precipitators are built close to and between kiln and chimney, but at older works (*e.g.*, on Thames-side) where the siting of kilns and chimneys often necessitates long flues, the results may be serious. The gases contain about 40 per cent. of moisture some of which will condense in long flues as a weak but corrosive acid. Condensation in the body of the precipitators will also result in corrosion and difficulty in operating the plant at the necessary high voltages. At one such works (No. 6455) it has been estimated that complete renewal of the interior of electrical precipitators may be necessary every four or five years. Certain precipitators in unfavourable situations, as for example at works No. 6285, have been so badly affected as to require dismantling and rebuilding from the foundations upwards. Nevertheless, it seems certain that low back-end temperatures attained by intensive chaining, dessicators, slurry preheaters and the like have come to stay, the resultant fuel-saving being of even greater importance than the disadvantages mentioned above. Much, of course, can be done to reduce condensation and the evils brought in its train by lagging of flues and of de-dusting plants and by reducing the amount of false air drawn in at ill-fitting back-ends.

Certain details regarding the operation of electrical precipitators still remain obscure and mechanical failures, *e.g.*, cracking of insulators, breakdown of rapping gear, etc., are frequent so that stoppages for necessary repairs, together with stops for routine inspection often amount to between 10 and 100 hours per month. There is therefore something to be said, at all events where smaller works are concerned, for the installation of de-dusting plant of improved cyclone type where, although the normal dust arrestment efficiency might be 10 or 15 per cent. below that for an electrical precipitator, operation would be more continuous. Power consumption for operation would be heavier, but depreciation and maintenance charges would probably be substantially less than for the more costly electrical precipitator.

The improvement already recorded with regard to low-level emissions continues. That relating to dust from grinding plants is particularly marked, but there is still room for improvement at packing plants. De-dusting units are mainly of the baghouse or modified baghouse type, but high-efficiency cyclones are used at two works and an electrical precipitator at another. Modern dust filters are usually fitted with electrical air heating devices and power consumption is considerable. Since the quality of paper bags for the home trade packing of cement has been reduced from 4-ply (32 gauge) to 3-ply (outer 32 gauge, 2 inner 28 gauge) there has been a considerable increase in the proportion of burst bags with consequent deterioration in low level conditions. A factor of some importance is the increase in bulk loading, a procedure which has much to recommend it from the point of view of economy and saving of paper. Technique in some cases is still rather crude, but provided properly constructed bulk transport containers are used and the cement is delivered via suitable pipes with flexible ends to a vehicle standing in a booth, with facilities for draughting and de-dusting, dust losses to the atmosphere can be reduced to very small proportions.

The practice of clearing and levelling, the laying out of lawns, the cultivation of gardens, the formation of concrete roads and various other forms of good housekeeping are on the increase, although some works appear reluctant to attempt the standards reached elsewhere.

With regard to the position on Thames-side, this has been dealt with at some length in earlier Reports. Almost half the cement in the country is produced in this area and production is now three to four times what it was some 25 years ago. The inevitable slip of dust is such that there must at times be periods of noticeable deposition and all that can be done is to ensure that these periods are of minimum frequency and of minimum duration. The District Inspector has continued to pay close attention and a number of visits have been paid by my Deputy Chief Inspector, who has kept in close touch with the Local Authorities concerned. The main and disappointing feature is that steel shortage has resulted in the retardation of the programme of repairs, renewals and construction referred to a year ago. There has been, however, further improvement especially with regard to low level emissions and to those from ancillary operations, *e.g.*, white cement, whiting, hydrated lime, etc. Various storage and handling operations give rise to dust emissions: some of these have been dealt with, some are in hand and some are still in the preliminary drawing-board stage. The scale of many of these was not fully apparent until other greater emissions had been reduced.

. . . A good deal of attention has been paid to ancillary operations at cement works, *e.g.*, production of whiting, hydrated lime and carbonate of lime and further progress in the provision of means for reduction of dust discharges can be recorded, especially on Thames-side."

HOUSING.

The serious shortage of fit housing continues.

The work done by the Council's Sanitary Inspectors to obtain the repair and improvement of existing property is given below in the report of the Chief Sanitary Inspector.

The number of dwellings completed by the Council in 1951 was 174 houses; by private enterprise, 18 houses.

100 dwellings were completed by Dartford Borough Council on that part of Temple Hill Estate which is in Dartford Rural District.

The effective waiting list of housing applicants at the end of March, 1952, numbered 1,035; the total registered applications for the year being 1,227. During the year 183 families were re-housed by the Council.

NEIGHBOURHOOD.	FAMILIES RE-HOUSED. April—March, 1950 1951.	April—March, 1951 1952.
Ridley	1	—
Ash	6	1
Fawkham	5	1
Hartley	15	2
West Kingsdown	2	15
Longfield	10	4
Southfleet	11	1
Betsham	2	1
Bean	0	2
Darenth	16	11
Stone	48	16
Eynsford	36	2
Farningham	9	3
Horton Kirby	5	6
South Darenth	12	9
Sutton-at-Hone	1	6
Lullingstone	0	—
Swanley	48	64
Crockenhill	18	3
Hextable	5	7
Wilmington	20	8
Hawley	4	6
Outside Rural District	12	15
	286	183

105 Council tenants were moved to accommodation more suitable to their requirements.

PREVALENCE OF INFECTIOUS AND OTHER DISEASES.

Notifiable Diseases (other than Tuberculosis) during the year 1951.

DISEASES.	AGE GROUPS. Under 1 Year	1—	2—	3—	4—	5—	10—	15—	20—	35—	45—	65—	Total Cases Notified	Cases Admitted Hospital	Total Deaths
Smallpox ... ...,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	—	2	1	—	1	16	4	1	1	1	—	—	27	7	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever	—	—	—	—	—	1	—	—	1	—	—	—	2	1	—
Dysentery (Bacillary) ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	2	2	1	—	—	1	2	2	4	5	8	5	32	8	23
Puerperal Pyrexia ...	—	—	—	—	—	—	—	—	—	1	—	—	1	1	—
Erysipelas	—	—	—	—	—	—	—	—	—	2	2	—	4	1	—
Poliomyelitis Paralytic ...	—	2	1	—	—	—	—	—	—	1	—	—	4	3	—
Poliomyelitis Non-Paralytic	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningococcal Infection	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough ...	11	15	15	10	18	49	3	—	—	—	—	—	121	1	1
Measles	18	51	58	75	99	301	26	2	3	4	—	—	637	6	—
Food Poisoning	—	1	—	—	—	—	—	1	3	—	3	—	8	1	—
Scabies	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—
Ophthalmia Neonatorum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTALS	31	73	76	85	118	368	35	7	12	14	13	5	837	29	24

13 measles, 5 pneumonia, 4 whooping cough, 2 scarlet fever, 1 paratyphoid, and 1 puerperal pyrexia occurred at institutions and hospitals.

Measles, 1951.

	Sutton-at-Hone	Stone	Wilmington	Eynsford	Darenth	Horton Kirby	Farningham	West Kingsdown	Southfleet	Hartley	Longfield	Ash	Fawkham	Lullingstone	Ridley	
January	28	6	10	3	3	8	—	5	—	1	3	—	—	—	—	67
February	37	4	3	6	4	47	—	—	—	7	16	3	—	—	—	127
March	40	8	6	3	3	37	1	40	2	1	2	7	—	—	—	150
April	24	13	6	3	13	5	2	4	2	—	—	5	1	—	—	78
May	19	17	12	1	8	2	2	—	3	—	1	6	2	—	—	73
June	10	4	6	—	3	1	—	1	46	—	2	2	—	—	—	75
July	2	9	2	1	—	1	—	—	19	—	1	—	—	—	—	35
August	3	16	—	—	5	—	—	—	3	—	1	—	—	—	—	28
September	1	—	2	—	—	—	—	—	—	1	—	—	—	—	—	4
October	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
November	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
December	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTALS ...	164	77	47	17	39	101	5	50	75	10	26	23	3	—	—	637

Whooping Cough, 1951.

	Sutton-at-Hone	Stone	Wilmington	Eynsford	Darenth	Horton Kirby	Farningham	West Kingsdown	Southfleet	Hartley	Longfield	Ash	Fawkham	Lullingstone	Ridley	
TOTALS ...	39	21	22	2	11	10	2	1	3	2	5	3	—	—	—	121

Pneumonia, 1951.

	Sutton-at-Hone	Stone	Wilmington	Eynsford	Darenth	Horton Kirby	Farningham	West Kingsdown	Southfleet	Hartley	Longfield	Ash	Fawkham	Lullingstone	Ridley	
TOTALS ...	4	10	5	1	3	2	2	1	3	—	—	—	—	—	—	31

Tuberculosis

AGE PERIODS.	NEW CASES.				DEATHS.			
	PULMONARY.		NON-PULMONARY.		PULMONARY.		NON-PULMONARY.	
	M.	F.	M.	F.	M.	F.	M.	F.
0—1	—	—	—	—	—	—	—	—
1—5	—	—	2	3	—	—	—	—
5—10	—	—	—	—	—	—	—	—
10—15	1	1	—	—	—	—	—	—
15—20	2	1	—	1	—	—	—	—
20—25	2	2	—	—	—	—	—	—
25—35	—	4	—	2	2	—	—	—
35—45	2	1	—	—	1	—	1	—
45—55	—	—	—	—	2	—	—	—
55—65	1	—	—	—	—	1	—	—
65 and upwards ...	1	—	—	—	2	—	—	—
TOTALS ...	9	9	2	6	7	1	1	—

The number of cases on the register at the end of 1951 was:—

PULMONARY.		NON-PULMONARY.	
M.	F.	M.	F.
160	105	19	21

Of the deaths, 2 pulmonary cases and the only non-pulmonary case were unnotified.

CONTROL OVER INFECTIOUS DISEASES.

Immunisation against Diphtheria.

The County Medical Officer has kindly supplied figures for children immunised against diphtheria, which may be summarised:—

	Primary Inoculation.	Reinforcing Inoculation.	Estimated Population.*
1951.			
0—4 years	368	14	3,181
5—14 years	98	500	5,304
1950.			
0—4 years	356	14	3,090
5—14 years	39	165	4,930

The number of children 0—14 years of age on December 31st, 1951, who had completed a course of diphtheria immunisation at any time before that date:—

		Estimated Population.*
1951	5,448	8,485
1950	5,551	8,020

* These estimates of mid-year child population have been provided by the Registrar General and are reproduced here with the permission of the Controller of H.M. Stationery Office.

Vaccination against Smallpox.

The number of persons vaccinated against smallpox:—

Age at 31st December.	Under 1.	1 to 4.	5 to 14.	15 or Over.	Total.
1951.					
Number vaccinated	192	118	38	34	382
Number re-vaccinated ...	—	3	16	147	166
1950.					
Number vaccinated	154	101	17	19	291
Number re-vaccinated ...	—	4	6	57	67

Surveillance of Smallpox Contacts.

Three contacts from Brighton's smallpox outbreak were under surveillance in January, 1951, and one from S.S. "Ranchi" in May, 1951.

Treatment of Scabies and Headlice.

During the year one family was treated for headlice.

The following figures of headlice found in schools in the district have been kindly supplied by the County School Medical Officer:—

Total for Academic Year. September 1950—July 1951.	
Boys.	Girls.
68	217

Venereal Disease.

The following figures of new cases attending during 1951 have kindly been supplied by the special clinic:—

Syphilis	3
Gonorrhœa	—
Other conditions	4

Chief Sanitary Inspector's Report

MADAM CHAIRMAN, LADIES AND GENTLEMEN,

I have the honour to present herewith my report for the year 1951.

I am,

Sir, Ladies and Gentlemen,

Your obedient servant,

F. SUTCH,

Chief Sanitary Inspector.

HOUSING.

Inspection of Dwelling Houses during the year:—

1.	(*a*)	Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts)	478
	(*b*)	Number of inspections made for the purpose	2,708
2.	(*a*)	Number of dwelling houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 and 1932	Nil
	(*b*)	Number of inspections made for the purpose	Nil
3.		Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	17
4.		Number of dwelling houses (exclusive of those referred to under the preceding sub-heading) found to be not in all respects reasonably fit for human habitation	306

Remedy of Defects during the year without service of Formal Notices:—

Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their officers	254

Action under Statutory Powers during the year:—

(*a*) Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936:—

(1) Number of dwelling houses in respect of which Notices were served requiring repairs 13

(2) Number of dwelling houses which were rendered fit after service of Formal Notices:—

(*a*) By owners 8

(*b*) By Local Authority in default of owners ... ... Nil

NOTE.—Only 8 dwellings rendered fit in 1951. The remainder in 1952.

(*b*) Proceedings under Public Health Acts:—

(1) Number of dwelling houses in respect of which Notices were served requiring defects to be remedied 18

(2) Number of dwelling houses in which defects were remedied after service of Formal Notices:—

(*a*) By owners 14

(*b*) By Local Authority in default of owners ... ... Nil

NOTE.—Four Notices outstanding at end of year but works completed in 1952.

(*c*) Proceedings under Sections 11 and 13 of the Housing Act, 1936:—

(1) Number of dwelling houses in respect of which "Demolition Orders" were made 3

(2) Number of dwelling houses demolished in pursuance of "Demolition Orders" 2

(3) Number of dwelling houses demolished by informal action 7

NOTE.—1-2 Willow Cottages, South Darenth—demolished by Statutory Action.
2 Chalkhole Cottages, Bower Lane, Eynsford—vacated, not yet demolished.

The following dwelling houses were demolished by Informal Action:—

"Searchlight Cottage," Southfleet.

"Oaklands Cottage," Green Street Green Road, Darenth.

5 and 6 Riverside, Eynsford.

1 and 2 Walden Cottages, Stonehill, Wilmington

Jones' Bungalow, Hever Road, West Kingsdown.

(*d*) Proceedings under Section 12 of the Housing Act, 1936:—

Part of building closed at "Hillside," Farningham 1

PUBLIC HEALTH ACT, 1936.

Summary of works carried out during 1951:—

Connections made to sewers	20
New cesspool drainage and privy pits abolished	12
New cesspool drainage and pail closets abolished	7
Cesspools abolished	17
Cesspools repaired	3
Cesspools reconstructed	2
Sewage disposal plant repaired	2
Sanitary Accommodation:—	
(i) Insufficient: Lavatory accommodation to licensed premises rebuilt	1
(ii) Defective: New water closet accommodation provided	19
New W.C. pans provided	14
Drainage:—	
(i) Reconstructed	2
(ii) Repaired	29
(iii) Cleansed	45
New sinks provided	2
New wash hand basins provided	1
Water pipes repaired	6
Piped water supply provided inside premises	2
Cooking ranges, stoves, coppers and boilers renewed or repaired	15
Water waste preventors renewed or repaired	10
Waste pipes to sinks, baths, and lavatory basins repaired	2
Gutters and rainwater pipes renewed or repaired	31
Roofs repaired	47
Chimney stacks repaired	12
External walls repaired	1
Dampness to walls abated	50
Windows repaired	40
Floors repaired	18
External doors renewed	3
Staircase repaired	1
Handrails provided to staircases	2
Permanent ventilation provided	2
Wall plaster repaired	68
Ceiling plaster repaired	86
Yard paving provided	4
New dustbins provided	56
Offensive accumulations removed	27
Rainwater soakaway provided	1
Properties disinfected after infectious disease	14
Properties disinfested of vermin	17
Properties treated for woodworm	1
Properties treated for wasp nests	21
Properties treated for ants	18
Defects remedied regarding movable dwellings	6
Movable dwellings removed	26
Flooding abated to premises	1
Total number of inspections made	1,962

INSPECTION AND SUPERVISION OF FOOD.

Milk Supply.

There are 24 registered distributors of milk and 8 registered dairies in the Rural District. The following licences have been issued under the Milk (Special Designation) (Raw Milk) Regulations, 1949, and the Milk (Special Designation) (Pasteurised and Sterilised) Regulations, 1949:—

Name and Address.		Dealers Licences.			Supplementary Licences.	
	T.T.	Past.	Ster.	T.T.	Past.	Ster.
S. H. Barnden, 7 Elm Road, Stone	—	—	1	—	—	—
Chapman & Son. West Kingsdown Dairy	1	1	—	—	—	—
H. S. Clarke, The Parade, Hartley	1	1	—	—	—	—
S. S. Cockburn, Hever General Stores, West Kingsdown ...	—	—	1	—	—	—
Dartford Industrial Co-operative Society, Ltd., Dartford ...	7	7	—	1	1	—
J. Diboll, General Stores, West Kingsdown	—	—	1	—	—	—
Evans & Payne, Station Road, Longfield	—	1	—	—	—	—
Express Dairy Co., Ltd., Tavistock Place, London	1	1	1	—	—	—
L. Griggs, Meadow View, Crockenhill	—	—	1	—	—	—
Alfred D. Hart, The Stores, Hever Road, West Kingsdown ...	—	—	1	—	—	—
Mrs. Hill & Son, Hook Green Farm, Wilmington	1	1	—	—	—	—
H. W. Hollands, Green Farm, Fawkham	1	1	—	—	—	—
Houlding Bros., Weylands Dairy, Darenth	1	1	—	—	—	—
London Wholesale Dairies, Shepherds Bush. London	—	—	—	1	1	1
Mrs. A. Mangon, Pasadena, East Hill, West Kingsdown ...	—	—	1	—	—	—
Nestle & Co., Hayes, Middlesex	—	—	—	1	1	1
Miss N. Parsons, Heathside Dairy, Wilmington	1	1	1	—	—	—
Peters' Dairy, Otford	—	—	—	1	1	—
A. E. Sheffield, Swyres Farm, Darenth	1	1	—	—	—	—
Surrey Milk Co., Sleaford Street, London	—	—	—	—	—	1
United Dairies, Ltd., Western Avenue, Acton	1	1	1	—	—	—
E. Widdows & Sons, Homefield Farm, Sutton-at-Hone ...	1	1	—	—	—	—
D. MacDougal, Yew Tree Farm, Hawley	—	1	—	—	—	—
Southwoods Dairy, Vale Road, Northfleet	—	—	—	1	1	—
Totals	17	19	9	5	5	3

Results of Informal Action regarding Dairy Premises.

Walls and floors repaired to two dairies.

Walls and ceilings cleansed to two dairies.

Total number of visits: 52.

Milk Sampling.

21 samples submitted to County Laboratory.

2 samples proved unsatisfactory.

GRADE.	NO. OF SAMPLES TAKEN.	NO. OF SAMPLES UNSATISFACTORY.
Tuberculin Tested	3	—
T.T. Pasteurised	1	—
Pasteurised	11	1
Sterilised	—	—
Raw Milk	1	1
TOTALS	16	2

4 milk samples were submitted to the County Laboratory for Biological test.

Tubercle bacilli were reported present in one sample (Arrangements were made for the milk to be pasteurised while the Veterinary Officer examined the herd and excluded the infected cow).

Ice Cream.

There are 68 premises registered for the sale of ice cream and 3 premises registered for the manufacture of ice cream.

105 visits were made by Inspectors during the year.

75 samples of ice cream were submitted to the County Laboratory.

The samples were graded as follows:—

Grade I	56	=	74%
„ II	12	=	16%
„ III	5	=	7%
„ IV	2	=	3%
	75		100%

Public Health (Meat) Regulations, 1924.

Summary of animals killed and carcases and offal inspected in private slaughterhouses:—

PARTICULARS.	COWS.	CALVES.	SHEEP.	PIGS.
Number killed	7	18	3	133
Number inspected	7	18	3	133

PARTICULARS.	COWS.	CALVES.	SHEEP.	PIGS.
(i) All diseases except tuberculosis:				
Whole carcases condemned ...	—	—	—	1
Carcase of which some part or organ was condemned	2	—	—	9
Percentage of number inspected with disease other than tuberculosis	28·5			7·5
(ii) Tuberculosis only:				
Whole carcase condemned ...	—	—	—	—
Carcase of which some part or organ was condemned	—	—	—	—
Percentage of number inspected	0	0	0	0

The following items were surrendered at slaughterhouses:—

1 pig carcase ...	Pyæmia.
2 pigs livers ...	Cloudy swelling.
3 pigs kidneys ...	Hydronephrosis.
2 pigs lungs ...	Pleurisy.
2 pigs livers ...	Ascaris Lumbricoides.
12 lbs. cows liver ...	Distomatosis.
16 lbs. cows liver ...	Multiple abscesses.

The following items were surrendered from shops and canteens:—

Meat	4 calves heads, 12 calves feet, 2 sheeps heads, 2 sheeps plucks, 162 lbs. imported rabbits, 17 lbs. fore end bacon.
Tinned Meat ...	179 tins of various meat weighing 2 cwt. 5 qrs. 3 lbs. 2 ozs.
Tinned Fish ...	56 tins of fish weighing 18 lbs. 3 ozs.
Tinned Milk ...	66 tins of milk weighing 2 qrs. 10 lbs.
Sundries	Fruit, vegetables, jam, etc. 27 tons 9 cwt. 28 lbs. apricot pulp in barrels. 716 tins weighing 2 tons 11 cwt. 8 lbs. 9 ozs. 5 dozen imported eggs.

Total number of visits made to shops and food premises: 346.

Informal Action by Inspectors.

Café	Hot water supply provided.
3 Cafés	Walls and ceilings cleansed.
Bakehouse	Walls and ceiling cleansed.
Food Premises ...	Roof repaired.

Food and Drugs Act, 1938.

I am indebted to the Chief Inspector, Weights and Measures Department, of the Kent County Council for the following report:—

Details of samples taken by the County Sampling Officers within the Dartford Rural District during the year ended 31st December, 1951:—

ARTICLE.	No.
Ammoniated Tincture of Quinine	1
Apricots in Syrup	1
Arrowroot	1
Beef Sausages	1
Bisurated Magnesia	1
Bitter Beer	1
Browning	1
Chocolate Flavoured Soft Drink	1
Coffee and Chicory Essence ...	1
Cold and Influenza Mixture ...	1
Concentrated Lobster Soup ...	1
Desiccated Coconut	1
Diced Beetroot	1
Dried Milk Powder	22
Fruit Shapes	1
Gin	1
Goats' Cream	1
Gravy Powder	1
Hydrogen Peroxide	1
Ice Cream	2
Laxative Syrup made from Figs	1
Luncheon Meat	1
Meat Soup	1
Mild Ale	1
Carried forward ...	46
Brought forward ...	46
Milk	49
Oil of Wintergreen (synthetic)	1
Pan Yan Pickle	1
Peeled Tomatoes	1
Pork Luncheon Meat	1
Pork Sausages	1
Processed Cheese Spread ...	1
Readi Cake Mixture	1
Rich Xmas Pudding	1
Salad Cream	1
Sandwich Spread	1
Scotch Broth	1
Soup Mixture	1
Sweetened Shortbread Mixture	1
Syrup of Figs	1
Table Jelly Crystals	1
Tincture of Iodine	1
Tinned Sweet Corn	1
Tomato Ketchup	1
Vegetable Sausage	1
Virol	1
Vitaminised Malto Bar ...	1
Whisky	2
White Pepper	1
TOTAL	119

SUMMARY.

Milks	49
Drugs	11
Spirits	3
Other samples	56
	119

All the above samples were genuine with the exception of the following:—

SAMPLE OF	ANALYSIS.	ACTION TAKEN.
Beef Sausage	26% deficient in meat.	Legal proceedings taken. Conviction: Fined £2 10s. 0d. with £5 5s. 0d. costs.
Milk	13·3% deficient in fat.	Further samples were taken and were satisfactory.
Milk	5% extraneous water.	Legal proceedings taken. Conviction: Fined £5 with £3 3s. 0d. costs.
Milk	5% deficient in fat.	Further samples were taken and were satisfactory.

Sample of	Analysis	Action Taken
Processed Cheese Spread	Unsatisfactory label.	Reported to the Ministry of Food.
Tincture of Iodine ...	Iodine 2·4%. Potassium Iodide 1·6%. Complies with B.P.1932 but not 1948.	Stocks withdrawn from sale.
Dried Milk Powder (9 samples)	High acidity or low solubility. Deterioration sufficient for condemning.	Stocks returned to the Ministry of Food.

SHOPS ACT, 1950.

There are 597 shops in the Rural Area.
Total number of inspections made during the year: 140.
No contraventions of the Shops Act, 1950, were found during the year.

PUBLIC HEALTH ACT, 1936. SECTION 269.

Licences to Erect or Station and Use a Movable Dwelling.

Number of sites licensed for movable dwellings	10
Number of licences granted in respect of individual caravans	39
Estimated number of persons resident in licensed camps during the year	450
Number of unlicensed caravans removed	26

ERADICATION OF VERMIN, Etc.

The following is a summary of work carried out during the year:—

Number of houses disinfested of bed bugs	17
Council houses disinfested of bed bugs	8
Private dwellings disinfested of bed bugs	9
Private dwellings treated for woodworm	1
Private dwellings treated for wasp nests	21
Private dwellings treated for ants nests	18

RODENT CONTROL.

Number of complaints received	125
Infestations found:	
Rats major	10
Rats minor	98
Mice major	—
Mice minor	17
Infestations found as a result of survey:	
Rats major	—
Rats minor	269
Mice major	—
Mice minor	—
Business premises treated	8
Private dwellings treated	386
Estimated kill:	
Ministry of Food Formula—Rats	1,438
By traps or other means—Rats	33
Mice	155
Sewer Treatment:	
Manholes tested	262
Infestations found	2
Infestations cleared	2

Sewers at Bean and Crockenhill now reported clear.

INSPECTION OF FACTORIES.

1. Inspections under Part I, Factories Act, 1937.

Premises.	No. on Register.	No. of Inspections.	No. of Written Notices.	No. of Occupiers Prosecuted.
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	13	9	7	—
(ii) Factories not included in (i) in which Section 7 is enforced by Local Authorities	114	107	5	—
(iii) Other premises in which Section 7 is enforced by Local Authorities (excluding Outworkers Premises	—	—	—	—
	127	116	12	—

2. Defects.

Particulars.	Defects Found.	Defects Remedied.	Referred to H.M. Inspector.	Referred by H.M. Inspector.	No. of Prosecutions.
Want of cleanliness (Section 1)	7	7	—	—	—
Overcrowding (Section 2) ...	—	—	—	—	—
Unreasonable temperature (Section 3)	—	—	—	—	—
Inadequate ventilation (Section 4)	—	—	—	—	—
Ineffective drainage of floors (Section 6)	—	—	—	—	—
Sanitary Conveniences (Section 7):					
(*a*) Insufficient	2	2	—	—	—
(*b*) Unsuitable or defective	3	3	—	1	—
(*c*) Not separate for sexes	—	—	—	—	—
(*d*) Other offences against the Act (excluding Outworkers) ...	—	—	—	—	—
Total	12	12	—	1	—

3. Outworkers.

(*a*)	Total number of outworkers notified to the Council in 1951 under Section 110 (1c), Factories Act, 1937	50
(*b*)	Total number of outworkers notified by Dartford Rural District Council to other Councils under Section 110 (2), Factories Act, 1937	Nil
(*c*)	Total number of outworkers notified to Dartford Rural District Council by other Councils	19
(*d*)	Total number of outworkers employed in Dartford Rural District	69
(*e*)	Total number of inspections of workplaces under Section 111 (i), Factories Act, 1937	6

(*f*) Scheduled occupations followed by outworkers employed in premises in Dartford Rural District: Making paper boxes (52), wearing apparel (4), making lampshades (1), embroidery (1), Christmas stockings (11).

Refuse Collection.

Some difficulty was experienced during the year due to men leaving the service, at one time there were eight men short, and it became necessary to work overtime to keep the refuse collection rounds clear. At the end of the year there still remained a shortage of two men.

Cesspool Emptying.

No changes to report in this service.

Salvage.

The following is a summary of collections for the year: —

	£	s.	d.
Rags	115	8	5
Bones	3	2	1
Bottles	42	1	1
Cullet	1	12	6
Tyres	1	0	0
Scrap Metal	18	9	0
Cardboard	374	15	3
Paper	1,042	7	7
TOTAL	£1,598	15	11